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# Before the FEDERAL COMMUNICATIONS COMMISSION

Washington, DC 20554

		AND STATES
In the Matter of		- 1995
Streamlining The Commission's Rules And Regulations For Satellite Application And Licensing Procedures	IB Docket No. 95-117  DOCKET FILE COPY ORIGIN	NAI

# COMMENTS OF GE AMERICAN COMMUNICATIONS, INC.

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#### Summary

These comments are submitted by GE American Communications (GE American), on behalf of its subsidiaries GE Capital Spacenet Services and GE American Communications Satellites and itself, with respect to the Commission's proposal to streamline and simplify the application and licensing procedures for satellite space and earth stations under Part 25

GE Americom and its subsidiaries are involved in all phases of satellite communications. We strongly endorse the Commission's efforts to do away with unnecessary and cumbersome regulatory rules and paperwork. This action will allow satellite service and VSAT providers to better serve their customers. We agree that some current requirements can be eliminated in the interests of streamlining the administrative process and relieving licensees of unnecessary and sometimes costly regulatory burdens.

Insofar as space stations are concerned, GE Americom supports the proposals to allow licensees to initiate construction of spacecraft and place spacecraft into inclined-orbit operation by notification rather than by prior Commission authorization. However, the Commission should provide public notice of these filings. This will permit parties to bring to the Commission any information relevant to such construction and inclined orbit operation, satisfying the underlying public interest concern of Title III of the Communications Act.

GE Americom also generally supports the Commission's other proposed changes to the application and regulatory processes affecting space stations. Our only concerns is that the proposals do not go far enough to reduce transponder loading reporting burdens.

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We suggest that these requirements be replaced by a simple obligation to inform the Commission when a spacecraft is taken out of service

With respect to earth stations, GE Americom supports the proposal to eliminate the four-year build-out requirement for VSAT networks and the requirement to report network additions yearly. We also agree that earth station operators should be allowed to upgrade their station equipment on a notice basis instead of only upon prior Commission approval. We believe that earth stations should be allowed to convert from private carriage to common carriage and from common carriage to private carriage with equal facility, as their licensees see fit.

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### COMMENTS OF GE AMERICAN COMMUNICATIONS, INC.

#### Introduction

GE American Communications, Inc. (GE American) and its wholly owned subsidiaries GE American Satellites, Inc. and GE Capital Spacenet Services, Inc. (GE Spacenet) collectively welcome the Commission's Notice of Proposed Rulemaking to streamline satellite application and licensing procedures.

GE Americom strongly supports the Commission's objective in this rulemaking: to "streamline application and licensing procedures and requirements for satellite space and earth stations... [to] allow service providers to operate without any unnecessary regulatory burdens or constraints and therefore to respond more quickly to their customers' needs." In most cases, the Commission proposes to take one step further beyond the liberal practices of the International Bureau in acting on case-by-case

Order FCC 95-285 (released August 11, 1995)(Notice).

Notice at ¶ 1

applications for routine and non-controversial earth and space station actions and to substitute licensee notification for Bureau approval

GE Americom supports replacement of licensee notification for prior Commission authorization in non-controversial matters affecting spacecraft, such as initiating construction and placing a satellite into inclined orbit. GE Americom also offers some further simplifications in routine matters involving reporting of satellite operations. We strongly support all of the simplifications proposed for earth station licensing, especially in the VSAT market.

I.

#### Approval of Certain Space Station Modifications By Licensee Notification is in the Public Interest

GE Americom believes that the rules proposed by the Commission for space stations strike the right balance between the need to eliminate outmoded and cumbersome regulatory requirements and the Commission's statutory obligations to oversee this vibrant industry. Like many of the streamlining improvements in the area of earth stations, the proposed space station rules take the logical step beyond the Bureau's liberal practice of routinely granting non-controversial applications by having licensees certify commencement of construction and inclined orbit operation. GE Americom supports the use of licensee notices in lieu of Commission action in such matters, provided that such licensee certifications are reported in the Commission's public notices.

## A. The Commission Should Allow Licensees to Begin Construction and to Place Their Satellites in Inclined Orbit Upon Notification to the Commission

The proposal to eliminate the requirement for a construction permit in favor of licensee notification,<sup>3</sup> for example, is another logical extension of the International Bureau's current practice of liberally granting waivers pursuant to section 319(d) of the Communications Act, as amended. As long as a licensee knows that construction is undertaken at its own risk, the substitution of a notice requirement for Commission authorization makes good sense.

We understand the Commission's proposals to mean that commencement of construction of a satellite upon notice can not occur in isolation but must be accompanied by an underlying application for construction, to use the satellite as a spare or to launch and operate it, containing Part 25 information. In other words, the only change here is that construction can be initiated on the basis of a letter rather than by a waiver under section 319(d). The prospective operator is not excused from making the required showing at the same time it submits its letter that to use the proposed satellite as a spare or to launch and operate it at a particular orbital location is in the public interest. The Commission should confirm that such notices cannot be filed, and construction commence, unless an underlying application is on file and that the construction should be consistent with the description of the satellite filed in the application.

This is only fair, since a licensee rarely commits the substantial funds necessary to construct a satellite and arrange to launch it without knowing whether it is to be used as a replacement for an existing satellite, a spare, or one seeking another designated orbital

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Notice at ¶ 7

location. Having such an application on file will forward the goals of preventing warehousing and compliance with the five-year rule. It will also allow customers and competitors to make intelligent predictions about future usage of the arc and the Commission to engage in advanced planning.

GE Americom also suggests that the Commission make clear when the "construction notice" should be filed. Specifically a satellite earth station operator that is not affiliated with a manufacturer should file such a letter before it executes a contract with its satellite supplier. For satellite licensees affiliated with satellite manufacturers, notice should be filed before the manufacturer begins to expend resources on behalf of its affiliate's project. The Commission should require notice of commencement of construction at the earliest practical point

In connection with this, GE Americom appreciates the clarification in proposed Section 25.155(b)(2) that the filing of notification that a firm is commencing the construction of a satellite does not establish a cut-off date but that an appropriate cut-off date will be announced in a subsequent public notice.

The same liberal process of using licensee notification instead of Commission authorization should be followed when licensees put their satellites into inclined orbits. This is another non-controversial action that the Commission approves routinely and can more simply be accomplished by licensee notification than Commission action, which requires duplicative renewal every 180 days. As for the contents of the notice, we agree that the licensee should specify the date of the commencement of the in-orbit operation, the initial extent of inclination, the rate of change in inclination per year and the expected

end-of-life of the satellite, and also that it will comply with the conditions typically put on such grants.<sup>4</sup>

## B. The Commission Should Consider Allowing Satellite Operators to Extend Their Licenses by Notification

Another routine and non-controversial action sought by satellite operators is to extend their operating licenses beyond the statutory maximum of ten years. The Bureau has traditionally recognized the value to customers of maintaining in orbit a satellite that has not reached the end of its in-orbit service life by almost invariably granted such operations with little discussion. This is another area that the Commission may wish to examine to determine whether letter notification, specifying the anticipated end of the in-orbit service life of the satellite, is more appropriate than prior authorization. The Commission has unquestioned authority to manage the global arc, and the fact remains that applicants must waive any rights to spectrum, pursuant to section 304 of the Act. If coupled with a requirement that licensees inform the Commission when a satellite has been placed in an inclined orbit and then decommissioned. a letter certification to extend the

That is, licensees should commit to periodically correct the satellite attitude to achieve a stationary spacecraft antenna pattern on the surface of the Earth and centered on the satellite's designated service area; to control all interference to adjacent satellites to levels not to exceed that which would be caused by the satellite in increased orbit; to be barred from claiming protection in excess of the protection that would be received by the satellite network operating without an inclined orbit; and to continue to maintain the space station at the authorized longitudinal orbital location in the geostationary satellite arc with the appropriate east-west stationkeeping tolerance. See, e.g., Hughes Communications Galaxy, 9 FCC Rcd 2155 (Comm.Carr.Bur. 1994). In adopting this proposal, the Commission should reiterate that, in its assignment policies, it may require older satellites in inclined orbits to vacate orbital positions in order to assign these locations to new satellites incorporating up-to-date technology.

license of an in-orbit satellite may well be appropriate and would be supported by GE Americom.

### C. The Commission Should Give Public Notice of All Certifications Concerning Construction of Satellites or Inclined Orbit Operations

GE Americom's support for the proposed notification process is conditioned on one additional step. We assume that the Commission will give public notice of a filing stating that a party intends to commence construction of a new satellite, or to put an older satellite into inclined orbit. This public notice process permits the Commission to meet its statutory obligations while recognizing that in the large majority of cases pre-authorization of construction and inclined orbit operations are in the public interest, and therefore do not require prior approval

Thus, for example, we recognize that section 319(d) of the Communications Act forbids the Commission from waiving the construction permit requirement unless the Commission finds that the public interest would be served by a notification process. We agree that the Congressional intent of section 319(d) can me met by a notification process — essentially a generic presumption of waiver — as long as the public receives timely notice and the opportunity to bring to the Commission's attention those special cases where advance construction is not in the public interest. GE Americom anticipates that any such cases would be rare. However, we think public notice is necessary in order to assure that the public interest is being served and to resolve any concern that the notification process will not necessarily satisfy.

Similarly, we believe that the public interest requires that adequate notice be given when satellite operators inform the Commission that they intend to begin inclined

operations. This process ensures that other satellite service companies have complete information regarding possible interference, as well as satellite life and the status of the particular orbital location

More generally, information regarding pre-authorization construction and inclined orbit operations will provide satellite users and the industry at large with important information to guide intelligent and informed planning of orbit resources. This will serve the public interest in ancillary Commission satellite proceedings by ensuring that parties have adequate information.

In short, GE Americom agrees that notification procedures can expedite service to the public and reduce regulatory burdens in at least these two circumstances, where the public interest is usually served by permitting such activity to go forward. The Commission can adequately protect the public interest by giving public notice of the notification filing, and reviewing any public concerns expressed in response (should such be filed) thereafter.

II.

## It Would Be Extremely Burdensome to Comply With Unnecessary Transponder Reporting Requirements

While GE Americom supports the use of notification in lieu of Commission approval in the case of routine and non-controversial matters involving spacecraft, we are concerned with some of the proposed reporting requirements for in-orbit operations. The Commission's proposes that satellite operators "describe" how each transponder is being used and the total capacity or percentage of time each transponder is actually

used for transmission and the amount of unused system capacity in the transponder." GE

Americom believes that there are better and more simple ways for the Commission to
obtain the information it needs to manage the orbital arc.

### A. It Would Be Unduly Expensive for the Industry to Gather This Information, Which is Only of Marginal Value to the Commission

GE Americom believes that reporting on in-orbit operations on a transponder-by-transponder basis is impractical and does not provide the Commission with information that is particularly useful to carry out its role. Well over 90 percent of the transponders on GE Americom's fleet of thirteen satellites is committed to provide full-time service to customers. However, while most capacity is in service twenty-four hours per day, the use of transponders is determined by customers. Some use is intermittent, depending on customer requirements. For example, some customers may operate SCPC traffic in the daytime only, while others may operate such traffic only after normal business hours. Thus, system capacity is not static but dynamic, meaning a "snapshot" at any one particular time may not necessarily be a true portrayal of transponder use at another time. In addition, actual hour-by-hour and day-by-day use of capacity is controlled by customers, making it extremely burdensome for GE Americom, or indeed for GE.

Notice at ¶ 14.

By comparison, reports on the progress of constructing satellites are important to the Commission in ensuring that the commitments of permittees to construct and launch their licensed systems will ensure that scarce orbital resources are used efficiently

## B. The Commission's Needs Can be Satisfied by Less Operating Information Than It Has Proposed

Information about in-orbit transponder usage might have been helpful in the earliest era of satellite communications, when the Commission saw a need to protect what it viewed then as a risky and speculative business in its infancy. But the industry has matured, and, with the Commission's emphasis on relying upon competition to keep supply trimmed to demand, such detailed reporting is no longer necessary.

It is difficult to imagine to which use the Commission would put pages of computer printouts of in-orbit operations, especially as budget constraints are increasingly requiring the Commission to "do more with less." If the reports the Notice appears to have in mind show that fleet capacity is underused, the Commission has no practical means of curing this situation. The Commission is not a guarantor of profitability or in the business of protecting communications service providers from overcapacity resulting from unduly optimistic business plans. In addition, restricting capacity in the market to correct underutilization would require the Commission to go back on decades of its policies favoring multiple and relatively open entry

If, on the other hand, detailed reports show that the aggregate fleet is operating at full capacity, such information would be difficult to interpret. The Commission would have no means of knowing whether, when capacity is fully utilized, prospective users of satellite communications are going unserved or whether simply the forces of supply and demand are in equipoise. And the Commission can trust to the competitive forces in the satellite industry that if the demand for satellite capacity is going unmet, operators will apply for new capacity

Certain information is vital, however, for the Commission to discharge its responsibility for managing and planning the domestic arc. It would seem that this need would be limited to whether a satellite is still operational or whether the orbital location it formerly occupied is open for reassignment. The Commission now requires licensees to certify when a satellite is placed in orbit and conforms to the terms and conditions of its authorization? -- which, for GE Americom, means when the satellite is on station, has been tested and is ready to begin commercial operations. The Commission could just as easily require operators to notify it that a satellite has been taken out of service within 30 days after it has been decommissioned.

If the Commission nevertheless retains a periodic reporting requirement, it should require the minimum information necessary for the Bureau to carry out its responsibilities and should require, as the Notice proposes, annual rather than semi-annual data submissions.

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#### The Proposed Earth Station Revisions Should be Adopted

GE Spacenet operates over fifteen VSAT networks, involving over 18,000 antennas in the field. Some of these are used by banks and other financial institutions for electronic funds processing or by insurance companies for claims processing. VSAT networks link retail outlets of chain drugstores, department stores, and gasoline refiners together with headquarters operations and third-party data centers. These customers use VSATs for many applications, principally credit card processing and inventory control, as

<sup>&</sup>lt;sup>7</sup> 47 C.F.R. § 25 120(d)(2)

well as business television. Large travel agents use VSATs to book transportation and lodging reservations. More generally, VSAT technology appeals to a variety of commercial sectors that need networks capable of transferring data by a low-cost, highly reliable, and proven form of communications. GE Americom applauds the Commission's proposals to further streamline and modify the VSAT licensing process, which will enable ground segment providers to respond more promptly to the requirements of their customers.

A. The Commission Should Adopt its Proposals to Eliminate Build-Out Requirements and Burdensome Reporting Requirements, and to Allow VSAT Operators to Upgrade Transmission Equipment Upon Notification

Of particular assistance to the VSAT business is the Commission's proposal to eliminate the requirement that a licensee complete construction of its network within the first 48 months of a ten-year license. This rule has unnecessarily complicated the provision of service to the many customers who seek to expand their VSAT networks after this artificial and short cut-off date. This is unduly burdensome, since it forces a licensee to choose between prematurely installing VSAT terminals prior to actual need or delaying the installation of the complete network beyond the four-year cut-off, resulting in additional cost and delay. Also, VSAT networks may in some cases be installed initially with relatively few sites but later are required to expand to greater number of sites as the businesses supported by the networks grow. More flexibility is required if customers are put their networks to increasingly efficient and valuable uses.

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Notice at ¶ 19

While the International Bureau has been helpful in giving case-by-case relief to licensees to allow them to expand their networks during the entire license term, we agree with the Commission's proposal to take this liberal policy to the logical next step, which is to eliminate the build-out requirement from Part 25 rules altogether. This will allow customers to avoid having to wait for favorable interim regulatory action in order to expand their VSAT networks.

This proposal goes hand-in-hand with the proposed elimination of the requirement that VSAT licensees specify the number of VSAT stations constructed annually, rather than at the end of the ten-year term, when the licensees for VSATs are renewed. VSAT networks are by now an established technology and are expanding quickly, and there is little need for the Commission to review the situation annually to ensure that the spectrum is used efficiently by its licensees. As long as a licensee maintains this information in its records, and such information is available to the Commission upon request, should the Commission ever have a need for such information, it would be readily available.

Of nearly equal importance to VSAT licensees is the Commission's proposal to eliminate the requirement for prior authorization of "minor" earth station modifications, and to replace this with a post-modification licensee letter. <sup>10</sup> GE Americom agrees that the modifications proposed as "minor" are such that prior authorization is not necessary to protect the public interest

Notice at ¶ 20.

Notice at ¶ 23. Compare 47 C.F.R. §§ 22.123(e), 22.163, and 22.165, which allow modifications to Part 22 one-way paging systems that do not increase the interference or service area contour to be installed without prior Commission authorization.

This change will allow licensees to keep up with technological developments more rapidly by allowing them to install, upon a simple notice requirement, more efficient antennas and transmitters. This change will also reduce costs for both licensees and the Commission. Typically rapid technology changes in transmission equipment may make the original equipment listed on a VSAT license obsolete, even in a relatively short period. VSAT operators therefore should have the flexibility to upgrade their transmitting equipment, consistent with VSAT operating parameters, as improvements become available during the ten-year term of a license. Again, this is another area where the Bureau staff has been sympathetic in granting permissions on a case-by-case basis and where its practice can simply be replaced by a licensee notice program.

Allowing VSAT stations to operate with increased power density, as proposed, <sup>11</sup> would add flexibility for licensees to support new applications required by their customers. The amount proposed gives VSAT operators sufficient margin and latitude to develop new higher-power technologies, which customers can use to produce a wider range of applications

### B. VSAT Operators Should be Allowed to Modify their Common Carrier or Private Carrier Status With Equal Facility and Simplicity

One point deserves further comment. The Commission has proposed that an earth station licensee providing services on a private carrier basis may change its operations to common carrier services by notifying the Commission. <sup>12</sup> We believe this can be further simplified, since earth stations that wish to change from private to common carrier service

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Notice at ¶ 21.

Notice at ¶ 23

can do so by filing tariffs. Therefore, no further notice to the Commission would appear to be necessary (although, in the interest of uniformity the Commission may want to require all holders of private carrier earth station licenses that desire to convert to common carrier status to submit separate letters changing their status concurrent with filing their site-specific tariffs).

By the same token, the Commission should allow operators of facilities licensed on a common carrier basis to convert their operations to a private status by cancellation of their tariffs. It is the experience of GE Spacenet that more earth stations have a need to improve the flexibility of their operations by converting from common carrier operations to private carrier operations than vice-versa. Many of these are older stations that were licensed as common carrier facilities prior to the Commission's decision that sales of satellite transponders on a private carriage basis are in the public interest of satellite providers and their customers. The Commission's transponder sales policies eventually paved the way for a majority of domestic transponder capacity to be offered on a non-common carrier basis, and the explosive growth of VSAT technology has resulted in numerous private, non-common carrier networks. This has had the ironic consequence of leaving the networks that pioneered VSAT technology with less flexibility than is enjoyed by newer systems, all of which operate in private carriage.

It would be consistent with the flexibility the Commission has always given satellite operators -- and the Commission's own precedents in the satellite transponder arena -- to allow licensees to convert common carrier earth station facilities into private carriage as

Domestic Fixed-Satellite Transponder Sales, 90 FCC 2d 1238 (1982), aff'd subnom. Wold Communications v. FCC, 735 F. 2d 1465 (D.C. Cir. 1984).

simply as possible. This, too, would be a "minor" change. Tens of thousands of earth stations are already operating in private carriage without any complaint on the part of users., GE Americom recommends that uniform notice of earth stations seeking to change their status from common carrier to private or vice versa be given by notification, as the Commission has proposed, and encourages the Commission to establish this expedited and simple means for satellite earth stations to change their status as their operators see fit.

#### C. The Burdens of Licensing of Other Antennas Should be Eased

Finally, GE Americom endorses the helpful proposal that the Commission increase the license term of transportable C-band antennas from one to ten years. <sup>14</sup> GE Americom does not have any such portables, but many of its customers do and use these for sports, special events and fast-breaking news. As the Commission notes, few, if any licensees would invest in the cost of such antennas for the purpose of keeping them only one year. <sup>15</sup> Also, there is no reason for Part 25 to differentiate between fixed and transportable antennas, given the Commission's experience that: "Temporary fixed earth stations have been able to operate... without causing harmful interference to terrestrial facilities."

In a related vein, the Commission should also simplify the conditions under which customers can conduct short tests of experimental antennas. GE Americom has experienced situations where its customers seek to test experimental antennas on satellites within its fleet, and special temporary authorization has been required to conduct such

Notice at ¶17.

Notice at ¶ 17

Notice at ¶ 17

special temporary authorization program, we believe that the process of evaluating such requests and granting special temporary authorization can be replaced with a system of dual notification. Under this concept, the antenna user would inform the Bureau about the parameters of the antenna and the duration of the test, and the satellite operator would notify the Bureau that it has coordinated the testing with adjacent satellites. This is another situation where a system of notification can accomplish the objectives now secured by prior authorization.

#### IV.

#### Other Matters Proposed in the Notice Should be Adopted

GE Americom agrees with the extension of the Commission's simplification initiatives into the proposed forms to be submitted by licensees, not only those that consolidate previously duplicative forms but the pared-down Part 25 information that must be submitted in connection with a new satellite. The proposals to make these forms available electronically will be extremely valuable to the interested public. The Commission should also consider whether to allow licensees to submit these forms by electronic filing.

GE Americom also supports updating of the Adjacent Satellite Interference

Analysis (ASIA) program to reflect real-world conditions and to be used as the exclusive
measurement of satellite interference. The data base supplied with the current program is
very much out of date. It contains information about systems that have long since been
retired and carrier types that are no longer used on satellite systems. GE Americom would

support requiring all Part 25 licensees to provide current information on diskette and to include any appropriate updates with their applications for new satellites.

There are some privacy concerns implicated in such a process, however, since most operators would be reluctant to provide information detailing their transponder loading plans due to the concern that the data could become public. This is particularly true with respect to new satellite filings, which may include information on new modulation techniques and other technical innovations of a proprietary nature. GE

American relies upon the Commission's sensitivity to protect data filings from disclosure and understands that the Commission will merge all operator supplied information within the data base so that it cannot be disaggregated on an operator-by-operator basis.

The data base should be updated and include the most and least interfering carriers, as well as the lowest carrier power that is desired for protection. It should also be updated to include the two-degree recommended mask for video. The code should be provided with the data so that users can match it up in a more user-friendly way with front-end processing.

#### Conclusion

GE Americom is largely in agreement with the Commission's streamlining and simplification proposals, which should be adopted and implemented with the modifications proposed here

Respectfully submitted,

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